CLAIMS

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- 1. A genetic construct for the selective expression of a nucleic acid sequence in plant stomatal guard cells, said construct containing the nucleic
- 5 acid sequence functionally linked to the promoter SEQ ID No. 1, or to a fragment or variant thereof having promoter activity.
 - 2. The construct of claim 1, wherein said promoter fragment contains SEQ ID No. 2.
- 3. The construct of claim 1, wherein said promoter fragment contains SEQ10 ID No. 3.
 - 4. The construct of claim 1, wherein said promoter fragment contains SEQ ID No. 4.
 - 5. The construct of claim 1, wherein the nucleic acid sequence or the encoded product are involved in the intracellular signalling pathway modulated by abscisic acid (ABA).
 - 6. The construct of claim 5, wherein said nucleic acid sequence contains the coding sequences of Osml, Racl, Katl, Ostl or Chll genes.
 - 7. The construct of claim 5, wherein said nucleic acid sequence codes for an antisense RNA.
- 20 8. A plant expression vector containing a genetic construct according to claims 1-7.
 - 9. The vector of claim 8, which is a bacterial plasmid, a bacterial artificial chromosome (BAC), a yeast artificial chromosome (YAC), a viral vector or a vector for *Agrobacterium*-mediated DNA transfer.
- 25 10. The vector of claim 9, which is a binary vector for Agrobacterium-mediated DNA transfer.
 - 11. A monocotyledonous or dicotyledonous plant containing a vector according to claims 8-10, or a genetic construct according to claims 1-7.

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- 12. The use of a genetic construct according to claims 1-7, or a vector according to claims 8-10, for selective expression of nucleic acid sequences in stomatal guard cells.
- 13. The use according to claim 12, wherein said heterologous sequence is involved in the regulation of stoma aperture/closure.
 - 14. A method for regulating the expression of nucleic acid sequences in a plant, which comprises introducing in said plant, in a vegetative or reproductive part thereof, a genetic construct according to claims 1-7 or a vector according to claims 8-10.